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Report No. 00-14

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The Relationship of Parental Military Background to the Demographic Characteristics of 11,195 Navy Recruits

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Report No. 00-14, supported by the Bureau of Naval Personnel, Department of the Navy, under reimbursable research work unit 6309. The views expressed in this article are those of the authors and do not reflect the official policy or position of the Department of the Navy, Department of Defense, or the U.S. Government. Approved for public release, distribution unlimited.

The authors acknowledge the contributions of the project sponsor, Navy Family Advocacy Program, whose support made the study possible. The authors extend their sincere gratitude to the staff at the Recruit Training Command, Great Lakes, IL, and especially the U.S. Navy recruits who participated in this study.

Human subjects participated in this study after giving their free and informed consent. This research has been conducted in compliance with all applicable Federal Regulations governing the Protection of Human Subjects in Research.

SUMMARY

Problem. Youth whose parents are veterans are more likely to volunteer for service themselves. Research from the 70s and early 80s concluded that children of military careerists were 2 to 6 times more likely to join the military than were their peers. These statistics suggest that the services recruit families, rather than individuals, into the military community. Recruiting campaigns are of primary importance among First-generation Recruits (FGRs), whose parents have no military background, because they may have little additional exposure to the military. To guide the development of recruiting policies, it is important for the services to understand the characteristics of specific subgroups of recruits such as this. By comparison, enlisting children of veterans (COVs) is a matter of both recruitment and retention. If the propensity of COVs to volunteer for service dropped substantially below what it has been in the past, it would suggest that the services are having difficulty retaining families. The military should monitor the impact parental military service has on succeeding generations of recruits.

Objective. This report explores the demographic characteristics of COVs versus FGRs. We estimated the percentage of young people with veteran parents among a cohort of Navy recruits entering the Navy between 1996 and 1997. We evaluated whether demographic differences existed among recruits that should be considered in developing recruiting policies. Finally, we compared the demographic characteristics and parental service backgrounds of recruits in our study with data for civilian young adults in the U.S. population.

Approach. From 1996 to 1997, 5,226 women and 5,969 men completed surveys during their first week at Recruit Training Command, Great Lakes, Illinois. Participants answered questions regarding demographics and family background.

Results. Fifty-two percent of the recruits in this study reported that at least one of their parents was a veteran. This is 16% higher than the estimated 36% of civilian youths with a veteran parent. We estimated that children of career military fathers volunteered for military service at rates 8 to 10 times higher than do children of non-veterans. Since previous estimates of the effect of a career military parent on volunteerism have ranged from 2 to 6 times higher, the importance of parental service for recruiting seems as great or greater than it has been in the past.

Fathers' military service was related to ethnicity, parental marital status, and family income. Fewer Black and Hispanic recruits reported that their fathers were veterans, and the percentages of minority recruits were lowest among recruits with Navy veteran fathers. COVs reported that their parents were divorced more often than FGRs. FGRs reported the lowest family incomes; recruits whose fathers served in the Navy reported the highest.

Conclusions. The demographic differences in race/ethnicity and socioeconomic status among recruits in this report may reflect differences in their motivations for enlisting. COVs are highly represented among Navy enlisted recruits. Family military background may encourage them to serve. FGRs may be most influenced by fluctuations in economic and employment trends. Future research on the impact of labor market pressures on recruiting might most profitably focus on changes among young adults who are children of non-veterans rather than on the entire young adult population. Given the high percentage of minority members among FGRs, the services also need to continue their commitment to integration and equality in promotion and training opportunities.

INTRODUCTION

A successful recruiting program is the foundation of the all-volunteer U.S. military. Each of the services strives to present an image that appeals to young people and encourages them to consider the advantages of military service during their transition to adulthood. All branches of the military offer enlistment incentives, including financial aid for a college education, highquality on-the-job training, full pay during training, opportunities for travel and adventure, and health, family, and recreational benefits. These incentives allow the military to compete with industry and higher education for the pool of young adults (Cox & Jobe, 1987).

Many young adults have personal knowledge of the military because they are children of veterans (COVs). This knowledge could positively or negatively affect their desire to serve, based on their assessment of the military. However, research suggests that, as a group, youths with parents who have served are more likely to volunteer for service themselves (Bowen, 1986; Faris, 1981). The Youth Attitude Tracking Study, sponsored by the Department of Defense (DoD), suggests that 36% of youths aged 16 to 24 years are COVs (Lehnus, personal communication, August 2, 1999). This is a large pool of young adults who may have a propensity to serve in the military.

After the initiation of the all-volunteer force (AVF), a few researchers tried to estimate the effect of parental military background on volunteerism. Based on a longitudinal survey of high school graduates (1972 to 1976), Faris (1981) estimated that young men with career military fathers were twice as likely to enlist (22%) as were sons of civilian families (10%). A review by Biderman and Haley (1979) found that in the early 1970s, 12% of first- and secondterm enlisted Navy personnel and 8% of Air Force enlistees had career military fathers with 20 or more years of service. Research during that time period also suggested that 11% to 23% of

newly commissioned officers had career military fathers. By comparison, only 4% of the U.S. population within a comparable age range were children of career military fathers. Biderman and Haley concluded that children of military careerists were 3 to 6 times more likely to join the military than were their peers.

These statistics suggest that in addition to recruiting individuals for a specified term of service, the military involves families, potentially for several generations, in the military community. In this light, the true newcomers are "first generation" recruits (FGRs), or recruits whose parents have no background in the U.S. Armed Forces. Recruiting campaigns are of primary importance among them because they may have little additional exposure to the military. In order to guide the development of recruiting policies, it is important for the services to understand the characteristics of specific subgroups of recruits such as this. Minimally, an understanding of the demographic characteristics of these targeted subgroups is required.

By comparison, enlisting COVs is not just a matter of recruitment, it is also one of retention. Not only labor market conditions and recruiting incentives, but parental example, family tradition, and personal familiarity influence COVs to volunteer for service (Faris, 1981). Military leaders are concerned about the experiences children have growing up in military communities. These concerns are fueled, in part, by an informal awareness that many of them will be among the military ranks of the future. There are some current demographic trends in the U.S. that will effect the representation of COVs within the services. In particular, the pool of veterans old enough to have recruit-age children is declining. The Defense Manpower Data Center (DMDC; Lehnus, personal communication, August 2, 1999) estimates that the number of young people with a veteran parent is shrinking yearly by about three quarters of a percent. Still, if the propensity of COVs to volunteer for service was substantially below what it has been in the past, military leaders should be concerned (Biderman & Haley, 1979). Such a trend would suggest that the services are having difficulty retaining families within the military community from one generation to the next. The military should monitor the impact parental military service has on succeeding generations of recruits.

This report explores the demographic characteristics of COVs versus FGRs. We estimated the percentage of young people with veteran parents among a cohort of Navy recruits entering the Navy between 1996 and 1997. We evaluated whether demographic differences existed among recruits that should be considered in developing recruiting policies. Finally, we compared the demographic characteristics and parental service backgrounds of recruits in our study with data for civilian young adults in the U.S. population.

METHOD

Participants

We surveyed 5,226 female recruits and 5,969 male recruits (see Table 1). The majority were high school graduates (84%), between 18 and 20 years old (70%), single with no children (84%), and White (61%). We assessed demographic differences between the male and female participants. Overall, women were somewhat more educated than men. More men reported being single, but they were somewhat more likely to have at least one child. Black and American Indian recruits were more represented among women, while Asian and White recruits had higher percentages among men. There were no differences in the percentage reporting that their parents were divorced. However, men more often said that their parents were married, while women

¹Sample sizes vary across analyses due to missing data, and they are reported individually.

were more likely to say that their parents never married. Finally, men more often reported family incomes of \$50,000 or more per year, while women more frequently reported \$25,000 or less.

Table 1 Demographic Characteristics of the Participants*

		Women (N = 5,226)	Men (N = 5,969)
Age (M)		19.70	19.82
Education $(\chi^2_{(1,11195)} = 56.13)$	GED or less	6%	10%
$(\chi(1,11195) - 30.13)$	High school graduate	85%	82%
	College/technical training	9%	8%
Ethnicity $(\chi^2_{(1,10951)} = 121.90)$	Black	23%	15%
$(\chi (1, 10951) - 121.90)$	American Indian	2%	2%
	Hispanic	11%	12%
	Asian	4%	5%
	White	58%	64%
	Other	2%	2%
Marital status $(\chi^2_{(1, 11133)} = 8.31)$	Single	88%	90%
Children $(\chi^2_{(1, 11024)} = 22.45)$	None	92%	90%
Parental marital status $(\chi^2_{(1, 10888)} = 47.47)$	Married/widowed	40%	44%
(A (1, 10888)/	Divorced/separated	47%	47%
	Never married/cohabiting	13%	9%
Parental income ($\chi^2_{(1,10888)} = 98.10$)	\$24,999	38%	31%
(I, 10000)	\$25,000-\$49,999	39%	38%
***************************************	\$50,000	23%	31%

^{*}All effects are significant at p < .01

Instruments

Demographic and Family History Questionnaire (DFHQ). The DFHQ asked about participants' age, race, marital status, children, and educational level. It also asked about family background, including parental income and marital status. Information about parental military experience from the DFHQ was used to create the comparison groups for this study.

Parental Service History (PSH). To assess PSH, participants were first asked if any parent had served in the military, and if so in which service branch they had served. Next, for each veteran parent participants were to list the number of years served. For this study we combined responses regarding parents and stepparents into two variables representing paternal and maternal service. Throughout the rest of our results and discussion, we have used the terms mother and father speaking inclusively of stepparents unless specifically stated otherwise.

This survey was conducted at the Recruit Training Command (RTC), Great Lakes Illinois, from 1996 to 1997. All gender-integrated units were invited to participate during their first week of training. Those who agreed to participate signed an informed consent form and received a privacy act statement describing the study and the procedures to ensure anonymity. Participants were told they did not have to answer any portion of the survey they were not comfortable with. They were offered professional counseling in the event that their participation was upsetting or stressful. The Committee for the Protection of Human Subjects at the Naval Health Research Center, San Diego, CA approved these procedures.

Analyses

Procedure

We initially computed summary statistics describing the representation of COVs among the recruits surveyed. Next we compared the demographic characteristics of COVs vs. FGRs.

This was followed by additional analyses of the demographic characteristics of COVs in relationship to length of parental service and to parental branch of service. We describe our analyses more specifically as we present our results. The criterion we used for signficance was p < .01. We chose this conservative criterion because of the large number of our participants and the number of statistical analyses we conducted.

RESULTS AND DISCUSSION

Parental Military Experience

Our first research objective was to estimate the representation of COVs among Navy recruits. Just over half (52%) of the recruits who participated in this study were COVs (see Table 2). In comparison, DoD Youth Attitude Tracking Survey data indicated that 36% of all 16- to 24year-olds in the U.S. population have a veteran parent (Lehnus, personal communication, August 2, 1999). In most cases only recruits' fathers (51%) had served. Few (4%) reported that their mothers were veterans, however, only about 1% of the participants in the DoD Tracking Survey had veteran mothers. Furthermore, about two out of three times, Tracking Survey participants who had veteran mothers also had veteran fathers. In our study, 84% of those with veteran mothers had veteran fathers as well.

Sixteen percent more of the recruits in our survey were COVs than would be expected if our respondents were representative of all recruit-aged youth. However, since those with family military backgrounds more often reported that their parents were divorced, it may be that having both parents and stepparents increases the likelihood that at least one of them will have served in the military. Excluding stepparents, 44% of participants' fathers and 3% of their mothers had served. Based on data from the Current Population Survey, in 1997, 28% of noninstitutionalized males in the United States between ages 35 and 65 were veterans (U.S. Bureau of Labor

Statistics, 1997). Among women in the same age group, 1% were veterans. Given these population data, regardless of stepparents, 16% more of the fathers of Navy recruits were veterans than might be expected, and at least 3 times the number expected had mothers who served in the military.²

Length of parental service. Although many participants' parents had served in the military, the majority served only one term. First enlistments last from 2 to 6 years, and 66% of veteran mothers and 67% of veteran fathers served 6 years or less with a modal time of 4 years. However, since the distribution of service years was skewed, the average length of time in service was 7 years (mothers: average = 6.79; fathers: average = 7.24). Figure 1 shows that the distribution for parental years of service is multimodal, peaking on even years from 2 to 8 and again at 18 or more years. These represent typical lengths of time for first-term enlistments and for retirement. Of all the recruits, 9% (men) to 10% (women) said that they had a parent who had already completed 18 or more years of service. Participants with career military parents represented 18% of COVs. Excluding stepparents, these percentages fell slightly, but 8% of all recruits still reported that a parent had served 18 or more years. Fathers were most likely to have served this long. Less than 1% reported that their mothers had served 18 or more years.

We estimated the percentage of career military veterans among adults aged 35 to 65 in 1997 based on the number of persons in the United States receiving military retirement pay.

According to the U.S. Department of Defense (DoD), Office of the Actuary (1998), slightly over

² We defined recruit-aged youths as all young men and women aged 17 to 25 in 1997, and estimated that their parents were between the ages of 35 and 65 at that time. Those parents with service backgrounds most likely entered the military between 1948 and 1985.

1 million people were receiving retirement pay in this age bracket. They represent about 7% of all veterans and 1% of the total noninstitutionalized adult population in this age range (U.S. Bureau of Labor Statistics, 1997). Based on these figures, the parents of recruits in our survey included 8 to 10 times more military careerists than would be expected if they were a random sample of the U.S. population. Further, there were more than twice as many careerists among those parents who were veterans as might be expected.

Table 2 Recruits with a Parent Who Served in the Military

	Maternal Military Experience			Military rience	Combined Parental Experience	
	Men	Women	Men	Women	Men	Women
No	96%	95%	49%	49%	48%	48%
Yes	4%	5%	51%	51%	52%	52%
Valid N	5,680	5,013	5,544	4,862	5,548	4,865

Figure 1. Length of parental service by gender

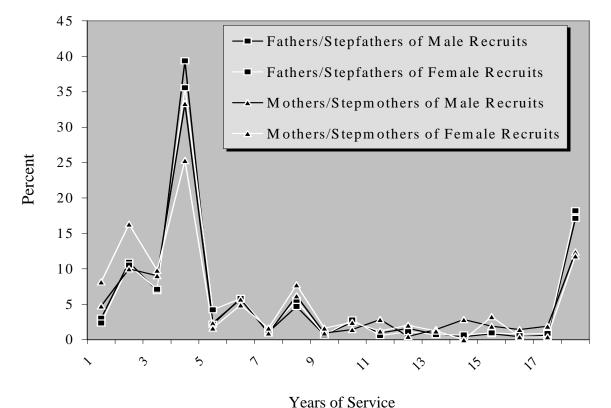


Table 3

Parental Service Branch

	Maternal	Service	Paternal	Service
	Women	Men	Women	Men
Navy	31%	26%	28%	31%
Army	41%	46%	42%	39%
Marines	5%	3%	9%	8%
Air Force	21%	23%	14%	14%
Coast Guard	1%	1%	1%	1%
Multiple	1%	1%	6%	7%
Total N	245	210	2505	2828

Table 4

Percentages of Navy Veterans by Length of Military Service

	Motl	ners	Fath	ers ^a
	Women	Men	Women	Men
1–3 Years	23%	22%	21%	24%
4 Years	39%	24%	32%	35%
5–8 Years	39%	28%	34%	37%
9–17 Years	29%	25%	32%	33%
18 + Years	35%	39%	42%	50%
Valid N	245	210	2505	2828

Note: This table shows the percentages of parents serving in the Navy vs other military services, among five groups of veteran parents categorized by the length of their military service. Since these percentages represent the same figure for different groups, they do not add up to 100%. The percentages also include Navy veterans with experience in multiple services.

^aMore fathers had served in the Navy among those who were career military (18+ years), $\chi^2(4,5333) = 126.27$, p < .001.

Branch of parental service. Participants' parents served in all branches of the U.S. military, but the Army was by far most common (see Table 3). For mothers and fathers, the Navy had the second highest representation, followed by the Air Force, the Marine Corps, and then the Coast Guard. A slightly greater percentage of mothers (22%) than fathers (14%) had served in the Air Force, while more fathers (9%) than mothers (4%) had been in the Marines. When both parents had military experience, 81% of male respondents and 83% of female respondents reported that their mother and father had been in the same service branch.

The relative percentages of parents with experience in each of the service branches closely follow the relative size of each of the services within the DoD. The Army is the largest service, employing about 35% of all service members, followed by the Navy (27%), the Air Force (26%) and the Marines (12%) (Military Family Resource Center, 1998). This rank order is also reflective of the veteran population of which participants' parents were members. The U.S. Department of Veterans Affairs (1995) reported that 48% of veterans aged 35 to 65 in 1997 had served in the Army. Twenty-three percent served in the Navy, while 17% were in the Air Force, 10% in the Marines, and 1% in the Coast Guard.

We would expect parental Navy service to be unusually common among Navy recruits because they are likely to have been influenced by their parents' choice of service. Compared with the veteran population percentage of 23%, Naval service was only about 3% to 8% higher among parents of recruits in our survey (see Table 3). However, Naval service was significantly more common among career military veteran fathers (see Table 4), and Navy representation (46%) surpassed the Army (32%) as the most common affiliation among fathers who had served 18 or more years. The relationship between Navy service and service length was not significant for mothers.

Demographic Comparisons

Our second research goal was to evaluate demographic differences between COVs and FGRs. We explored demographic differences based only on fathers' military backgrounds. This was because there were few mothers who had served, and when participants' mothers had served, their fathers had almost always served as well. The number of instances where a participant reported that their mother alone had served were too few for meaningful analysis.

Demographic characteristics and paternal service. Table 5 presents the results of bivariate and multivariate analyses relating demographic characteristics to paternal military service. We evaluated rates of paternal service by age, ethnicity, education, marital status, children, parental marital status, and family income using individual chi-square comparisons and t-tests. Next, in separate analyses for male and female recruits, we entered these demographic characteristics into stepwise logistic regression equations predicting paternal military experience. Overall, we found a number of demographic differences in the percentages of participants with veteran fathers. In fact, only education was not related to paternal military service. Recruits may be very homogenous in educational background because the Navy carefully screens them to insure that most enter with a high school diploma.

Several of the relationships we found were small. For instance, there were bivariate and unique multivariate differences based on age. Recruits with veteran fathers tended to be a little older than FGRs (men = .19 years; women = .36 years). The logistic odds of having a veteran father increased by a factor of only 1.04 per year of age. Comparing the oldest (35) participant to the youngest (17), this means that the odds multiply by 1.99 for men and 2.08 for women.

We found two additional small differences for female recruits. Ten percent fewer women reported that their fathers were veterans among those who were single (never married) than

among women reporting any other marital status. Eight percent more had veteran fathers among those with children than without children. In multivariate analyses, only one of these two relationships remained significant. Women who reported having children were 1.47 times more likely to have veteran fathers in comparison to women who had no children.

Because these demographic relationships for women were small, and since only one of them remained significant in mulitivariate analyses, it is likely that they were secondary to relationships between parental military background and other demographic characteristics. For example, marital status was no longer related to paternal service after controlling for age. Older recruits were more often married, cohabiting, or divorced, so the small increase in average age among women with veteran fathers seems to account for the difference in their marital status.

We found the most consistent differences in the percentages of participants with veteran fathers when considering ethnicity, parental marital status, and parental income level. Recruits reporting family incomes of \$24,000 or more were more likely to indicate paternal service than were participants reporting less than \$24,000. Among participants whose parents were divorced, a greater percentage reported that their fathers were veterans. Finally, White recruits were 1.45 to 1.54 times more likely to report that their fathers were veterans than were Black recruits, and they were 2.17 to 2.56 times more likely than Hispanic recruits to have a father who was a veteran.

Table 5 Demographic Differences in the Likelihood Recruits were Children of Veteran Fathers (COVFs)

	Group Percent	ages of COVFs	Logistic Oc	dds Ratios
	Women	Men	Women ^a	Men ^b
Ethnicity	$\chi^2_{(5,4760)} = 138.42$	$\chi^2_{(5,5441)} = 190.25$		
Black	43%	44%	.65	.69
Native American	61%	57%	ns	ns
Hispanic	34%	31%	.46	.39
Asian	55%	43%	ns	.59
White ^c	58%	57%		
Other	48%	39%	ns	.59
Parent marital status	$\chi^2_{(2,4761)} = 66.24$	$\chi^2_{(2,5383)} = 87.43$		
Married/widowed ^c	50%	49%		
Divorced/separated	56%	57%	1.36	1.40
Never married	38%	35%	ns	.72
Parental income	$\chi^2_{(2,4737)} = 57.51$	$\chi^2_{(2,5414)} = 59.94$		
\$24,000°	45%	44%		
\$25,000-\$49,999	54%	53%	1.36	1.34
\$50,000	58%	57%	1.50	1.45
Age (M)	$F_{(1,4727)} = 21.92$	$F_{(1,5263)} = 7.15$		
No service	19.51	19.75	1.04	1.04
Paternal service	19.87	19.94	1.04	1.04
Children	$\chi^2_{(1,4816)} = 8.33$			
None ^c	51%			
One or more	59%		1.47	
Marital status	$\chi^2_{(1,4833)} = 17.29$			
Single (never mrd.) ^c	50%			
Other	60%			

Note: Only demographic variables identifying subgroups with significantly different percentages of COVFs among them are listed in this table. All chisquares are significant at p < .01. Nonsignificant changes in multivariate odds for specific demographic subgroups are noted by "ns." $^{a}N = 4846$. Comparison groups for odds ratios.

Demographic Characteristics and Length of Service. We evaluated whether demographic differences among recruits would be more pronounced if the length of time fathers had served was considered. Race/ethnicity had the strongest relationship to the number of years fathers had served, but almost entirely because Asian recruits reported the longest lengths of paternal service (see Table 6). Asian recruits did not have unusually high percentages of COVs among them in our earlier analyses, so race/ethnic differences in the length of time Asian parents served appear unrelated to any previously reported findings.

There were only two more small relationships between demographics and paternal service length. Female recruits with children reported more years of service (8.88 years) for their fathers than women without children (7.25 years), $F_{(1,2478)} = 15.78$. Similarly, the fathers of married women served longer than the fathers single women (7.20 vs. 8.55 years), $F_{(1,2487)} = 16.27$. These results are parallel to differences we found comparing FGRs with all COVs, but they reveal that the greatest contrasts are between FGRs and women whose fathers served at least 9 years or more. There were no longer differences in the number of women who had children if participants with fathers serving 9 or more years were excluded.

After looking at bivariate distributions between some of the demographic variables and service length, we wondered if there might be some nonlinear relationships. In particular, recruits whose fathers served modal lengths of time (4 years or 18 or more years) seemed to have more similar characteristics than COVs who reported less common lengths of paternal service. In order to explore nonlinear relationships, we created two additional dichotomous variables. One identified all participants whose fathers were military careerists (18 or more years of service). The other identified those whose fathers served either 4 or 18 or more years.

Comparing these new variables with participant demographics produced minimal results. There were a few relationships similar to those for ethnicity, marital status, and children reported already, but with smaller effect sizes. Modal paternal service length was indicative of slightly older mean ages among recruits (women: 20.04; men: 20.07) than was nonmodal service (women: 19.67; men: 19.77), which is related to our earlier finding that FGRs were slightly younger than COVs. On recomparison the average age of FGRs (women: 19.67; men: 19.77) was only significantly different from that of participants reporting modal paternal service. Five to six percent more participants with fathers serving modal lengths of time were between ages 20 and 24, while more FGRs were between 17 and 19. There were no differences in the percentages of 25- to 35-year-olds. When comparing those with career military fathers to other COVs, there was a small 9% increase in the number of male recruits whose parents were married or widowed rather than divorced or never married, $\chi^2_{(2,2758)}$ = 15.99, p < .001. COVs generally reported higher rates of parental divorce than FGRs, but parental divorce rates were only different for men who

Table 6

Mean Years of Fathers' Service by Ethnicity

	Men	Women
Ethnicity	$F_{(3,2777)} = 26.07, p < .01$	$F_{(3,2450)} = 27.79, p < .01$
Black	7.74 ^a	8.35 ^b
Native American	5.44 ^a	7.46 ^{bc}
Hispanic	6.90^{a}	6.72 ^{bc}
Asian	12.30	13.19
White	6.69 ^a	6.78 ^c
Other	7.69^{a}	8.77 ^{bc}

were FGRs (41%) and men whose fathers served less than 18 years (53%).

^{abc}Subsets with statistically similar group means

Demographic Characteristics and Navy Service. Since all of the participants in this study were Navy recruits, we evaluated whether demographic differences existed based on paternal Navy service. Considering only participants who were COVs, we compared those with Navy veteran fathers to those with fathers who served in other military branches. Table 7 reports the results of bivariate and multivariate logistic regression analyses contrasting the characteristics of these two subgroups. In our logistic regression analysis, we included the number of years parents had served in the military. Length of service is a potentially confounding variable related to Navy service and to participant demographics. Parents who were in the Navy served an average of 1 year longer than veterans from other service branches (see Table 7). In this logistic analysis, all of the demographic variables, along with years of service, were entered in one stepwise block. Next, we entered interaction terms between each demographic variable and length of service in a second stepwise block.

Paternal Navy service was related to ethnicity, and for female recruits, it was related to family income. In comparison with those whose fathers served elsewhere, children of Navy veterans were more likely to identify themselves as White or Asian, and 10% more women had fathers who were Navy veterans in the highest (37%) vs. the lowest (27%) income groups. The bivariate relationships we found initially were also significant in the multivariate analysis. No interaction terms were significant.

	Group Percent	ages of CONFs	Logistic O	dds Ratios
	Women	Men	Women ^a	Men ^b
Years of service (M)	$F_{(1,2504)} = 30.52$	$F_{(1,2827)} = 54.15$	R = .21	R = .20
Navy	8.33	8.15	1.04	1.05
Other	7.00	6.52		
Ethnicity	$\chi^2_{(5,2456)} = 60.51$	$\chi^2_{(5,2783)} = 61.49$		
Black	20%	20%	.46	.40
Native American	30%	37%	ns	ns
Hispanic	25%	27%	ns	.58
Asian	52%	52%	ns	ns
White ^c	35%	38%		
Other	32%	31%	ns	ns
Parental income	$\chi^2_{(2,2442)} = 17.45$			
\$24,000°	27%			
\$25,000–\$49,999	34%		ns	
\$50,000	37%		1.51	

Note: Only demographic variables identifying subgroups with significantly different percentages of CONFs among them are listed in this table. All chisquares are signficant at p < .01. Nonsignficant changes in multivariate odds for specific demographic subgroups are noted by "ns." a N=2259. b N=2500. Comparison groups for odds ratios.

Table 8

Parental Income of Recruits and Paternal Service

	Recruit Survey						1990 Census ^a
	Women				Men		
	None	Other	Navy	None	Other	Navy	U.S. Households
Income	$\chi^2_{(4,4737)} = 74.35**$			$\chi^2_{(4,5414)} = 62.30**$			
\$24,999	44%	36%	28%	36%	27%	25%	26%
\$25,000-\$49,999	36%	40%	42%	36%	39%	40%	37%
\$50,000	20%	24%	30%	28%	34%	35%	37%

^aCensus figures were calculated based on all U.S. households where the household head was between the ages of 35 and 65 (U. S. Census Bureau, 1992).

Table 9

Race/Ethnicity of Recruits and Paternal Service

	Recruit Survey						USDE ^a	VA ^b
•	Women			Men				
•	None	Other	Navy	None	Other	Navy	HS Degree	Veterans
Ethnicity	$\chi^2_{(5,4760)} = 194.47**$			$\chi^2_{(5,5441)} = 242.31**$				
Black	26%	22%	12%	17%	16%	7%	13%	9%
Hispanic	15%	8%	5%	16%	8%	5%	11%	4%
White	51%	62%	72%	57%	69%	78%	71%	84%
Other ^c	8%	8%	11%	10%	7%	10%	5%	3%

^aU.S. Department of Education: Average percentage of 18-24 year olds completing high school degrees or equivalencies, 1995 - 1997 (U.S. Department of Education, 1997; 1998; 1999).

^{**}p < .001.

 $^{^{}b}$ U.S. Department of Veterans Affairs: Veterans from the Korean War through the Post-Vietnam era (U.S. Department of Veterans Affairs, 1995). c Percentages for Native American and Asian/Pacific Islanders are not included separately because they were not available for the population data. $^{**}p < .001$

The economic and ethnic differences in this analysis exaggerated our previous findings comparing COVs vs. FGRs. Table 8 compares family income levels for recruits with non-veteran parents, recruits whose parents served in military branches other than the Navy, and recruits with Navy veteran parents. It also lists data from the 1990 U.S. census for households headed by an adult between the ages of 35 and 65. Recruits' reports of their parents' income and census figures are not ideally comparable because recruit-aged youths are often inaccurate in estimating family income (U.S. Department of Defense, 1996). Participants' self-reports reflect their impressions of their families' economic circumstances. However, income data for the civilian population still provide a comparative perspective.

In Table 8, FGRs have the lowest family incomes, while recruits whose fathers served in the Navy have the highest. As noted previously, women reported slightly lower family income levels than men. In line with these two trends, the largest percentage of recruits in the low-income group was among women who were FGRs (44%). This percentage was 8% larger than the percentage among those reporting paternal service outside the Navy and 16% larger than among those with Navy veteran fathers. The smallest percentages of recruits in the low-income group were among men with Navy veteran fathers (25%).

Race/ethnicity was the variable most consistently related to parental military background. Table 9 divides participants into six groups, based on their gender and their parents' military background, and lists the race/ethnic representation among them. Table 9 also lists comparative data from the Department of Education on the race/ethnicity of 18- to 24-year-old adults completing high school or equivalency degrees from 1995 to 1997 and data on the race/ethnicity of U.S. veterans between the ages of 35 and 65 (U.S. Department of Education, 1997; 1998; 1999; U.S. Department of Veterans Affairs, 1995).

Table 9 shows that the percentages of Hispanic and Black recruits increase when comparing the children of Navy veterans to COVs from other services and then to FGRs. In the U.S. military, there is greater minority representation among women than men (Westat Inc., 1994), and this pattern is also evident among the participants in this survey. As a result, female FGRs include the highest percentages of minorities (49%) and differ most from the Department of Education population data. Minority representation is lowest among male recruits with Navy veteran fathers (22%).

We considered whether these ethnic differences existed in part because COVs are constrained by the historical composition of the U.S. military force (i.e. their race/ethnicity is determined by their parents). If recruits' parents joined the military between 1948 and 1985, they served from the Korean War era through the post-Vietnam period. This is a broad time range that covers the race/ethnic integration of the armed forces and the implementation of the AVF (Moskos & Butler, 1996). However, the percentages of all minorities among veterans who served during that time frame (16%) is certainly below what it is in the U.S. population from which recruits are enlisted today (29%; see Table 9). The percentage of minorities among veterans in this age group is from 6% to 33% lower than the percentage in any subgroup of recruits who participated in our study. This suggests that minorities are highly represented among recruits who are COVs and FGRs alike.

CONCLUSIONS

Research Limitations

The findings of this research must be considered in the context of its limitations. The information regarding parental military experience, which was available in this survey of recruits, was limited in three ways. First we were not able to positively identify parents who were

military careerists. Career status is important because it indicates a commitment to the service that parents may have conveyed to their children. We used years of service as a substitute variable, but since some of these recruits' parents were probably still serving, it represents career status imperfectly. We also could not identify how involved participants had been in the military community during their formative years. Recruits' parents may have served, but they may have separated from the service before their children were born. Additionally the possibility exists that some of the parents who served were not the individuals with whom recruits were living during childhood. Finally, we did not know whether participants' parents had been officers or enlisted personnel. This might be related to the demographic characteristics of recruits. For instance, throughout the DoD there are twice as many minorities among enlisted personnel (36.3%) as there are among officers (16.2%; Military Family Resource Center, 1998). Including data on parents' ranks may be helpful for future research.

Research Implications

The first implication of this research is that COVs are highly represented among Navy recruits. Half (52%) of our participants were COVs, 16% more than are estimated in the U.S. population of recruit-aged youths. Previous research studies on the effect of parental service on volunteerism have only focused on the impact of a career military parent, so we cannot compare this finding for children of all veterans with data from previous studies. However, research has suggested that children of career military fathers are 2 to 6 times more likely to volunteer than are their peers (Biderman & Haley, 1979; Faris, 1981). Among our participants, we estimated that children of career military parents volunteered at rates 8 to 10 times higher than their peers. This is an even greater ratio than has been found in the past.

The military services should consider the influence of service life on military families with children because it appears to be a helpful recruiting tool. Since the initiation of the AVF in the 70s, all of the services have expanded their programs and services for military families. If children of career veterans are more likely to volunteer now than in the past, this increased family focus may have played a role. Our results further suggest that the DoD cannot dismiss the importance of the military experience for volunteers serving even one or two terms. DoD statistics show that in the lowest enlisted pay grades (E1 to E4), about 17% of active duty personnel are raising children. This figure rises to 69% among those from E5 to E6 (Military Family Resource Center, 1998). The majority of our participants' parents had served 2 to 6 years, and even if they were born after their parents separated from active duty, it is still likely that they learned some of the pros and cons of military service from their parents.

Biderman and Haley (1979) pointed out that the COVs are a manpower resource that is relatively independent of fluctuations within the labor market. The thriving economy and the nature of the AVF currently make COVs an important, albeit diminishing, resource. If the downsizing of the military continues, there will be fewer veterans among future generations of parents. COVs will continue to have a high propensity to enlist, but recruiting strategies that appeal to FGRs will become more important.

FGRs were demographically different from COVs in this study, and this fact suggests some additional research implications. The most substantial demographic difference between FGRs and COVs was in race/ethnicity. There were also differences in socioeconomic level and parental marital status. One implication of these findings is that race/ethnicity, socioeconomic status, and family structure must be considered when making comparisons between these two subgroups of recruits. After controlling these factors, future studies should further consider

differences in family background and military adjustment, performance, and commitment. Two studies have compared career commitment among military personnel who are children of military careerists vs. FGRs (Bowen, 1986; Faris, 1981). However, these studies have reported conflicting findings regarding enlisted personnel and have not considered demographic variables.

There are two likely reasons for the differences among recruits in ethnicity and parental income. First, as previously noted, the race and ethnic characteristics of COVs are constrained by the composition of the military force of the previous generation. Second, it is likely that different factors motivate recruits to volunteer for service. Both family military traditions and economic factors have motivated people to join military organizations throughout human history (Faris, 1981). Although tradition and economics are certainly not mutually exclusive motivating factors, one or the other may play a more important role for some recruits than others.

If economic factors, such as monetary incentives, employment opportunities, and educational benefits, are the primary motivating force among FGRs, these volunteers should be expected to come from families with fewer resources. They may perceive limited educational and employment opportunities for themselves and feel unprepared to compete for them. If this is the case, recruits from the lowest socioeconomic groups should be overrepresented among FGRs as they appear to be in this survey. Future research on the impact of labor market pressures on recruiting should focus on changes within this subgroup of recruits rather than on the entire recruit population. FGRs are probably most responsive to fluctuations in economic and employment trends in this country.

Minority groups should comprise a larger percentage of those motivated by economic factors because they are overrepresented among the economically disadvantaged in the United States. Even when the economy is strong, economic prospects do not increase equally for

minority groups. During the 1980s employment opportunities for Black men eroded more than those for White men, and White women gained more opportunities than Black women (Caputo, 1995). In the 1990s, although the U.S. economy grew overall, the income gap between socioeconomic groups widened, and minority groups fell further behind. Ethnic disparities in household incomes are glaring. In 1995 the net worth of the median Black household (\$7,400) was only 12% of the median for White households. Hispanic households were even lower, with a median net worth of \$5,000 (Collins, Leondar-Wright, & Sklar, 1999).

Minorities would also be expected to enter the service because the military has a reputation as an equal opportunity employer. Cox and Jobe (1987) noted that military service is a strong competitor to higher education in recruiting minority youths because of this reputation. The high percentage of minority members among first-generation military recruits in our study is an indication that minority youth are choosing the military because they perceive it as a viable employment option. Minority individuals who volunteer for the service without a family military tradition may include a higher percentage of minority recruits because they see military service as a route toward equality and economic opportunity in the face of growing disparities.

Our research implies that the military's reputation as a fair employer is an important recruiting tool, and that the DoD must continue its efforts to ensure an impartial work environment. Our results highlight the fact that the military does not just recruit individuals, but families, perhaps for several generations. In this light, FGRs represent the real newcomers in the military community. They are the direction of change for future military ranks and for future cohorts of veteran parents. These parents and their children will have had a first-hand view of the viability of the military's commitment to all qualified young people moving into the workforce.

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1. Report Date (DD MM YY) 2. Report Type Final		3. DATES COVERED (from - to) June 96 to Jan 2000		
4. TITLE AND SUBTITLE The Relationship of Parental Military Backon Characteristics of 11,195 Navy Recruits	5a. Contract Number: 5b. Grant Number: 5c. Program Element: BUPERS 5d. Project Number: Reimbursable			
6. AUTHORS Valerie A. Stander & Lex L. I	5e. Task Number:			
7. PERFORMING ORGANIZATION NAME(S) AND ADD	5f. Work Unit Number: 6309			
Naval Health Research Center				
P.O. Box 85122 San Diego, CA 92186-5122	P.O. Box 85122 San Diego, CA 92186-5122			
8. SPONSORING/MONITORING AGENCY NAMES(S)	AND ADDRESS(ES)	NUMBER Report No. 00-14		
Chief, Bureau of Medicine and Surgery	Commanding Officer, Navy Personnel Command			
MED-02 2600 E St NW	10. Sponsor/Monitor's Acronyms(s) BUMED, NAVPERSCOM			
Washington DC 20372-5300	5720 Integrity Dr. Millington, TN 38055-0500	11. Sponsor/Monitor's Report Number(s)		
12 DISTRIBUTION/AVAIL ARII ITY STATEMENT		•		

Approved for public release; distribution unlimited.

13. SUPPLEMENTARY NOTES

14. ABSTRACT (maximum 200 words)

This report explored the characteristics of Navy recruits who are children of veterans (COVs) versus first-generation recruits (FGRs) whose parents have no military service experience. It estimated the percentage of COVs among a cohort of 11,195 Navy recruits entering the Navy between 1996 and 1997 and evaluated whether demographic differences existed between recruits who were COVs and recruits who were FGRs. Finally, this study compared the demographic characteristics and parental service backgrounds of recruits in this study with data for civilian young adults in the U.S. population. Results showed that 52% of all participating recruits were COVs, 16% more than the estimated 36% among civilian youths. The results also suggested that children of career military fathers may volunteer for service at rates 8 to 10 times higher than do children of non-veterans. Fathers' military service was related to ethnicity, parental marital status, and family income. The implications of these findings for recruiting policies are discussed.

15. SUBJECT TERMS Childhood Sexual Abuse, Research Methodology

16. SECURIT			17. LIMITATION		19a. NAME OF RESPONSIBLE PERSON
a. REPORT		D. THIS PAGE	OF ABSTRACT UNCL	OF PAGES 29	Commanding Officer
UNCL	UNCL	UNCL	0.102		19b. TELEPHONE NUMBER (INCLUDING AREA CODE) COMM/DSN: (619) 553-8429